

also submit that all of these claims now satisfy the requirements of 35 USC § 112. Thus, the Applicants believe that all of these claims are now in allowable form.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, the Examiner should telephone Mr. Peter L. Michaelson, Esq. at (732) 530-6671 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Specification objection

The Examiner has objected to the substitute specification due to its inclusion of embedded hyperlinks and/or other forms of browser-executable code. The Examiner has required the Applicant to delete this code.

While the specification does indeed include hyperlinks, the Applicants believe that the text of the hyperlinks is a necessary component of the specification in order to comply with the requirements of the first paragraph of 35 USC § 112. However, there is no need whatsoever for any of the hyperlinks to be active. Accordingly, and as sanctioned by MPEP § 608.01 and the portion thereof entitled "Hyperlinks and Others Forms of Browser Executable Code", the Applicants respectfully request the Examiner to disable all of the hyperlinks as well as all other forms of browser executable code in the specification whenever the text of the application is to be loaded into the USPTO web database.

Given this instruction, the Applicants now submit that this objection should be withdrawn.

Status of pending claims

Claim 107 has been slightly amended. No other claims have been amended; no claims have been canceled.

Rejections

A. 35 USC § 112

The Examiner has rejected claims 107, 37-44, 46-52, 54-59, 61-67 and 69, as they stood prior to this amendment, under the provisions of the second paragraph of 35 USC § 112 as being indefinite.

Specifically, the Examiner points to the recitation "the further file" appearing in claim 107, line 18 as lacking clear antecedent basis.

Upon review of this rejection, the Examiner is quite correct. As such, the Applicants have now amended claim 107 appropriately.

As such, the Applicants submit that all their claims, as they presently stand, are sufficiently definite and consequently patentable under the provisions of 35 USC § 112.

## B. 35 USC § 103

The Examiner has rejected claims 3-10, 12-18, 20-25, 27-33, 35, 37-44, 46-52, 54-59, 61-67, 69, 71-78, 80-86, 88-93, 95-102, and 104-108, as they stood prior to this amendment, under the provisions of 35 USC § 103 as being obvious over the teachings in the Judson patent (United States patent 5,737,619 issued on April 7, 1998 to D. H. Judson) taken in view of those in the Capek et al patent (United States patent 6,094,677 issued to P. G. Capek et al on July 25, 2000). This rejection is respectfully traversed.

In particular, the Examiner states that the Judson patent teaches a desire to display locally cached information, such as ads, to a user's web browser while the user waits for requested page content to be downloaded. With respect to the information being image content, the Examiner states that "the embedded code provides a link to the address of the image file", with the "content of the image file providing the message/advertisement". Given these apparent teachings, the Examiner notes that "this is an example of using tag code to decouple the message/ad/object content from the first web page". With this in mind, the Examiner then finds that the Judson patent teaches several processes/tests that determine/control browser function in order to implement the invention presumably described in that patent.

Having recognized these aspects, the Examiner then turns to the Capek et al patent. That patent, as the Examiner states, describes methods to insert information,

e.g., ads, during delays in retrieving browser requested pages/information. In the regard, the Examiner states that the Capek et al patent also describes the use of browser executed applets to accomplish several functions, e.g., detecting a client request for remote information, determining future delay duration and selecting relevant ads based on a user's profile.

Given this, the Examiner then concludes that "it would have been obvious to one of ordinary skill at the time of the invention to have provided code-based applets with that of Judson in a manner taught by Capek et al so that the tests and routines of Judson could be accomplished." On this basis, the Examiner ostensibly concludes that the invention recited in each of the Applicants' independent claims would be obvious in view of these combined teachings and hence unpatentable under the provisions of 35 USC § 103.

As the Examiner will soon see, his conclusion is not correct. In fact, combining the references in the manner suggested by the Examiner yields an approach for interstitial display that suffers from the very same deficiencies inherent in the methodology taught by the Judson patent -- deficiencies which the present invention advantageously solve! That approach not only teaches away from the present invention but more specifically leads one in a totally opposite direction to that which the present Applicants teach and recite in their independent claims.

To properly provide the Examiner with a full appreciation of the fundamental differences between the Judson and Capek et al patents, as combined by the Examiner,

and the present invention, the Applicants will first enumerate the salient teachings of the Judson patent, contrast the present invention to those teachings, then describe the salient teachings of the Capek et al patent and finally discuss what would result from combining the teachings of these two patents and contrast that result with the present invention, as currently claimed.

First, the Judson patent teaches, as the Examiner correctly and generally notes, the concept of Internet-delivered interstitial advertising.

Under the methodology taught by the Judson patent, advertising content, in the form of an object, is embedded within a web page itself and, once that page has been downloaded and locally stored, is subsequently parsed from the page, accessed from storage and finally rendered during a next ensuing interstitial interval. In that regard, the object is itself embedded in an existing web page in such a manner that the object is masked from page content, i.e., the object is not displayed to a user, until the user activates a link on that page to transition to a next page. When the existing page is downloaded, the object is read from the page and stored in local memory from which, as a result of link activation and during the next interstitial interval, that object is accessed and rendered while the next page is being downloaded. In that regard, see col. 2, line 59 et seq. of this patent which expressly states:

"The invention is preferably implemented in a computer having a processor, an operating system, a graphical user interface and a HTTP-compliant browser. In such case,

the novel and advantageous features of the invention are achieved using a first means, responsive to activation of a link from a web page, for retrieving an information object masked within the web page, and a second means for displaying information from the information object on the graphical user interface as the browser establishes the link. Preferably, the information object is masked by an HTML comment tag, which may include other HTML tags nested therein to format the information in the object."

Also, see col. 5, line 33 et seq. which states:

"... an information 'object' is preferably placed within a comment tag of a web page and thus is 'ignored' by the browser in the formatting of the document then being displayed. This information object, however, is also saved to a separate file or cache within the client."

and, col. 6, line 6 et seq. which states:

"However, because the information object is embedded within a comment tag, it is hidden or 'masked' and thus is ignored by the display routines of the browser." [emphasis added]

This patent also teaches, in col. 7, line 14 et seq., that the information object is not limited to being embedded within an existing web page itself, but can be "embedded within a home page of the browser or supported elsewhere within the client itself". Furthermore, as described in col. 8, line 40 et seq., this information object may include an applet that, when executed by the

client browser, may "generate an animated figure or icon, some aural output, a scrolling display, or a combination thereof". This applet may be associated with a given hypertext document -- either by being directly embedded within the document itself or downloaded from a server, that supplied the document itself, into browser cache. In that regard, col. 8, line 36 et seq. states as follows:

"An applet resides on the server associated with a web page and is downloaded to the client browser after a link is established to the web page. The browser includes an engine for executing the downloaded applets. With this type of browser, the invention caches or otherwise stores a downloaded applet and later uses it, preferably when a new, related link is established."

In that regard, in the context of the flowchart depicted in FIG. 11 and specifically downloading a hypertext document "with its associated information object" (see col. 8, line 57 et seq.), its accompanying description in col. 9, line 28 et seq. states:

"The method begins at step 110 by downloading a first (or 'source') hypertext document (which then becomes the 'current web page' within the context of FIG. 3). This document includes an associated information object, such as an advertising graphic that will be associated with some user-selectable display graphic (e.g., a link) in the first hypertext document. ... To complete the routine, the user activates the user-selectable clickable graphic at step 118 to link to a second (or 'target') hypertext object. As discussed above, this retrieves the

information object for display on the client interface as the new link is established."

This patent further teaches, in col. 7, line 18 et seq., that the information object may be displayed whenever a call to a web page is made, such as when a search to a particular URL is initiated or a previously stored URL is launched. Further, the client can store multiple objects, in the form of information advertisements, so that the browser may select, for display, any of them either at random or based on comparing types of web pages accessed by the user.

Hence, rather than displaying an object that was embedded with (or, as discussed below, appended to) the web page, this patent also teaches that the browser may instead display a different locally-stored object: one that has been randomly selected from a group of locally stored objects, or one that is specifically selected from the group through a comparison process. But, regardless of how that object is selected, its selection occurs by the browser itself acting in response to link activation or entry of a URL, and NOT as a result of execution of any tag in the page itself.

In particular, if such a selection process were to be used -- regardless of what it is, there is no teaching whatsoever in this patent (certainly none in col. 7, lines 11-33) which indicates that the web page would still need to contain corresponding tags that reference the selected object. In fact, given the repeated and express teachings of this patent, it is eminently clear to one of ordinary skill that if the object is to be selected by the



browser, there is simply NO reason for the page to contain any corresponding tags that reference that object. Any such selection process would simply be launched as a result of link activation or URL entry, and nothing else. In essence, if the object were not present in the page or referenced by it -- and here it would clearly not be, any such tags would not be present either. Inasmuch as this latter scenario, through which the browser selects the object for display, is irrelevant to the Applicants' present invention -- since the present invention does not rely on the client browser to select an object for interstitial display, this scenario will be ignored hereinafter.

Further, the Judson patent expressly notes that appending rather than embedding such objects to their referring web pages is appropriate for relatively large objects, i.e., "high bandwidth content" such as, e.g., high resolution graphics, audio or video. In that regard, col. 9, line 11 et seq. states as follows:

"An information object may include high bandwidth content including high resolution graphics, audio and video. In some instances then, the object may be relatively large in size such that "in-lining" the object [within] an embedded link (e.g., within an HTML comment tag) may not be the most efficient way of downloading. In such case, it will be desirable (although not required) to store the information object in the web server 106 separate from any particular hypertext document so that the object may be downloaded to the client machine (with a hypertext document) by being 'appended' at the distal or 'backend' of the hypertext document that may be used to bring the

object down to the client machine. (Of course, as noted above, information objects may be stored at the client machine in other ways besides being brought down by hypertext documents.)"  
[emphasis added]

As the Examiner can now appreciate, this patent clearly and expressly contemplates, to the extent relevant to the present invention, the concept of obtaining an object that is to be interstitially displayed from a web page itself, such as one embedded within that page or appended to it in some fashion (e.g., distally).

Hence, the information object, as taught by the Judson patent and contrary to the Examiner's view, is indeed tightly coupled to the web page. The reason is very simple: the object to be displayed is either downloaded with or appended to the web page with a transition from that page to another causing this particular object to be displayed -- hence evincing a very tight and intimate coupling between the two with the page containing either the object itself and/or a direct reference to it.

This methodology carries a very serious drawback which fundamentally limits its use.

Specifically, this methodology relies on establishing a very explicit association (reference) in a source (referring) web page between that page and an object to be interstitially displayed. In practice, this explicit association, being rather inflexible, effectively mandates that any change to the object is likely to be rather tedious

and expensive to implement; thus, rendering this approach very impractical and infeasible to use.

*why not remove or change the image file?*

In particular, if an advertiser, using the page-embedded (or appended) object approach taught by the Judson patent, wanted to change the content of an advertisement (advertising object) associated with one or more source pages -- which regularly occurs, that advertiser would need to separately access each and every source web page to change the particular advertising object itself that is directly embedded within or appended to that particular page. As the Examiner can undoubtedly appreciate, doing so can be extremely labor-intensive and hence expensive, particularly if a relatively large number of web pages is affected -- as would be the case with even a moderately sized Internet ad campaign: each and every such page would need to be individually accessed and appropriately edited.

Alternatively, if that advertising object were in the form of an applet downloaded from a remote server along with or as part of the referring web page -- an alternate technique taught by the Judson patent (see, e.g., col. 8, line 37 et seq.), and the advertiser wanted to use a different applet for one or more of these source web pages (such as to affect, e.g., different animation), then again each and every such page, would need to be changed to either include or point to a different applet -- here too a potentially labor-intensive and expensive endeavor.

The Applicants teach an strikingly and markedly different concept of providing interstitial advertisements -

a concept that simply neither exists nor is even suggested in the cited, let alone applied, art.

Specifically, the Applicants' inventive technique, as described on page 22, line 14 et seq. of the present specification, relies on embedding an advertising tag (generally "embedded code") within each of a number of different web pages ("referring web pages") stored on one or more remote network web servers. The advertising tag is very compact and contains two components: one component for downloading a script from a specified distribution server, and the other component being a network address of an information management server (e.g., an advertising management server).

During the course of browsing the web, a user may select and download to his(her) client browser a web page that happens to contain such a tag. As that web page is downloaded, the browser interprets and processes the coding of that page, including the embedded advertising tag itself.

Once the tag is processed, the client browser downloads a script from its corresponding distribution server, which, in turn when executed, downloads and instantiates an agent. Once the agent is itself executing under the browser, the agent issues a download request to the information management server, as specified in the advertising tag.

In response to this request, the information management server -- NOT THE CLIENT or its BROWSER-- selects a given advertisement to be rendered at the requesting

client browser and then downloads a corresponding AdDescriptor (manifest) file to the client. The browser, in turn (and through the agent), reads the manifest and issues, in succession, a separate request to download each media player file (to the extent it does not then reside on the client computer) and each content (media) file, both as specified in the AdDescriptor file, for that particular advertisement. Once all these files have been downloaded, the advertisement is queued for playing and will be played (by the agent) during an ensuing interstitial interval. The media and player files are themselves then politely downloaded, i.e., in background during idle time of the network connection to the client browser.

As the Examiner can plainly see, the Applicants' inventive approach totally and completely decouples any advertisement content from the referring web page. No such content is stored in the page or appended to it, nor needs to be. Nor is there any need to pre-store any advertisement content on the client.

This inventive approach carries several distinct advantages over traditional Internet advertising approaches, such as that disclosed in the Judson patent. First, since the tag is extremely compact, it does not adversely affect download time for the referring web page. Second, by downloading a manifest file which contains a listing of media and player files (along with their network addresses), the agent, once executing, downloads all the information it needs to render any highly media-rich advertisement (or generally speaking any information object). Third, whenever ad campaigns change, the advertisement can be readily

changed, at the information management server, without affecting the coding of any of the referring web pages -- which can save considerable labor and expense. Fourth, the manifest file as well as all the information object files are "politely" downloaded by the agent in background during network idle time, i.e., when network connections to the browser are not busy such as while a user is viewing a web page that has just been rendered.

Now, as to the Capek et al patent, this patent is directed to the general concept of utilizing retrieval delays, that arise in interactive systems, to provide information to a user stationed at a client computer. Such delays arise where, e.g., the client interactively retrieves program material from a remote server. In particular, this information is provided to the user by being "inserted" into a normal stream of user requested data and then displayed during a retrieval interval, but only if an expected dwell time is sufficiently long. See, e.g., col. 4, line 43 et seq., and col. 6, line 66 et seq. of the Capek et al patent. As described in col. 5, line 9 et seq., the insertion may be retrieved from a repository of insertion material, either randomly or based on user input.

In particular, with reference to FIG. 2 and the accompanying discussion in col. 7, line 18 et seq., insertion manager 20, which accesses insertion repository 22, is communicatively situated between client computer 24 and server 26. In response to a request from the client computer for program material from server 26, the insertion manager accesses an insertion from the repository and then provides the insertion to the client. As noted in col. 7,

line 48 et seq., an insertion can be data in virtually any format supported by the interactive system, e.g., text, graphics, animation, motion, video, sound and so forth, and can depict, among other items, advertisements. Furthermore, as indicated in col. 8, line 11 et seq., manager 20 can utilize information in a client profile in order to select an appropriate insertion given a user's interests, income or other characteristics as reflected in the profile. In some instances, as noted in col. 8, line 48 et seq., the insertion may be automatically provided, as an interstitial, to the user regardless of the retrieval delay time.

As noted in col. 9, line 6 et seq., the insertion may include a control mechanism which enables the client to interact with and control the insertion. This control mechanism, as indicated in this portion of the patent, at a minimum, can involve replacing the insertion by requested program material once the program material is received from the server. This mechanism can be a tag as expressly stated, in pertinent part, in col. 9, line 25 et seq. of the Capek et al patent:

"For example, in the context of the WWW, the control mechanism may be implemented using a META tag, JavaScript, or Java. The META tag is a defined HTML tag that is easily implemented within the HTML code of the insertion. The META tag includes an attribute which instructs a web browser to load another web page in a predefined number of seconds. ... Java ... is capable of providing the client with elaborate control over the insertion and web browser functions, including the user interface."

FIG. 3 of the Capek et al patent clearly depicts, in flowchart form, this operation. With reference to this figure and as described in its accompanying description in col. 9, line 43 et seq., initially insertion manager 20 detects, as represented by block 30, a request from the client for program material. The insertion manager then forwards, as represented by block 32, this request onward to its intended destination. As indicated by block 34, insertion manager 20 then retrieves a particular insertion from repository 22 and sends that insertion to the client while the program material is being retrieved. Thereafter, as represented by block 36, the program material is presented to the client. FIG. 7 depicts, in flowchart form, a sophisticated version of this operation. In this embodiment, as described in col. 11, line 61 et seq., after the request from the client is forwarded to its destination -- this step being represented by block 82, the insertion manager determines, as represented by block 84 whether to present an insertion to the client or not. If manager 20 decides not to present an insertion, due to, e.g., the expected retrieval time being insufficient to support retrieval and display of the insertion, then the insertion manager simply sends the program material it receives from the destination to the client and ends its processing. Alternatively, should the insertion manager decide to provide an insertion, then, as symbolized by blocks 90 and 92, it selects an appropriate insertion based on the client profile and then sends that insertion to the client. The insertion is cached at the client for display, after which the insertion manager sends the program material to the client; these operations being depicted by blocks 94 and 96.



There can be no doubt the Capek et al patent clearly generally implicates interstitial display. It does.

That being said, the Examiner must keenly focus on the specific order of events explicitly taught by this patent to cause an insertion to occur -- regardless of whether the insertion is interstitial or not. As discussed above, first a client request occurs, and then an insertion is retrieved and provided to the client. The insertion may contain a suitable control mechanism, implemented by a tag, for controlling the insertion. Hence, in essence, the request comes first, then the insertion with the tag is downloaded and finally the insertion is processed. It is only while the insertion is being processed -- i.e., after the request has occurred and after the insertion has been downloaded -- that the tag is executed to control the insertion. Not before.

The Applicants' inventive approach vastly differs from the approach taught by the Capek et al patent. As described above, in the Applicants' claimed invention, a referring web page containing an advertising tag is first downloaded and then that page is executed. In response to execution of this tag, the Applicants' information object is downloaded and subsequently interstitially displayed. The advertising tag, once executed, brings down the information object. In sharp contrast, the Applicants' information object does not bring down or contain the tag as taught by the Capek et al patent.

Now, having discussed the fundamental teachings of the Judson and the Capek et al patents, the Examiner will

now readily see that combining these teachings will result in an interstitial display technique that embodies the exact same deficiency as does the approach taught by the Judson patent. In that regard, the combined teachings will lead one of ordinary skill in the art not only AWAY from the present invention, but moreover in a direction DIAMETRICALLY OPPOSITE to it -- contrary to the Examiner's view.

Let us start, as the Examiner does, with the approach taught by the Judson patent. Clearly, a desire exists in the art -- as the Examiner correctly notes -- to utilize interstitial intervals to display information.

Based on the approach taught by the Judson patent, a specific information object, for interstitial display, would be embedded within a source web page or appended to it. Next, assume *arguendo*, that a person of ordinary skill, were to turn to the Capek et al patent and add its teachings to the Judson approach. What would result?

That person might likely think to modify the Judson approach by not embedding or appending the object to the source web page and instead, as taught by the Capek et al patent, placing that object on a remote server. In accordance with the teachings of the Capek et al patent, the object would then be provided to the client computer in response to a request which the client issues for program material, here being, as in the Judson approach, link activation or URL entry for transitioning to a next successive web page. Unfortunately, this result would unnecessarily extend the interstitial interval (retrieval time) for the simple reason that neither the object nor the

next successive page would be downloaded until the client specifically issues that request, with both of those items then being downloaded during the ensuing interstitial interval. Hence, the user stationed at the client would need to wait, once (s)he invokes a link or enters a URL to transition to a next successive page, for the object to be downloaded prior to its being interstitially rendered. This, in turn, would exacerbate the retrieval delay at the client and clearly be disadvantageous. Consequently, that person of skill in the art would not likely combine the teachings of the Judson and Capek et al patents in that manner.

Alternatively, rather than the source web page containing an explicit association (reference) to an embedded object or to a distally situated one, that reference could very likely be a network address of the object situated on the remote server. Unfortunately, doing so results in the exact same problem inherent in the teachings of the Judson patent alone: the web page still contains a very explicit association (reference) to a specific object. The only difference here is that the address no longer references a local object, but rather one that resides remotely from the page. As such, anytime a person wanted to change the object interstitially displayed through a given source web page, the content in that page would need to be changed to reflect a different reference (address). Doing so is very expensive and highly labor-intensive particularly where a relatively large number of web pages is affected, as each and every such page would need to be individually accessed and its content appropriately edited to effectuate the address change. This

is the very same inflexibility inherent in the Judson approach. Combining the teachings of the Capek et al patent with those of the Judson patent contribute absolutely nothing to alleviate this fundamental deficiency -- a deficiency which the present Applicants advantageously SOLVE!

Furthermore, the Examiner notes that the Judson patent teachings the use of various tests and routines, specifically for: determining whether a link is activated, retrieving and displaying an object simultaneously while a requested page is being downloaded, and determining whether the requested page containing an object has been fully downloaded and is ready for display. The Examiner, based on the teachings in the Capek et al patent, opines that these tests and routines could be implemented through browser-executed applets. Now, even if such applets were incorporated into the approach taught by the Judson patent -- as the Examiner proposes, that still in no way ameliorates the need for the explicit association required between the source (referring) web page and the object. What the Examiner must keep in mind is that, as noted above, the applets taught by the Capek et al patent, though described in the form of "control mechanisms", are downloaded as, e.g., Java, tags contained within the object itself -- not prior to it.

Now, assume arguendo that such applets were to exist in the client browser separately from the object. In that case, the function provided by these applets still requires knowledge of the specific object that is to be interstitially displayed. In the absence of such knowledge,

these applets would simply not know which object to display and hence would display none. Changing the mode through which each of these tests and routines is implemented -- whether applet-based or otherwise -- does not eliminate, reduce or even affect the need for an explicit reference, as taught by the Judson patent, between the source web page and the object to be displayed. As such, use of such applets would also contribute absolutely nothing to alleviate the fundamental deficiency in the Judson approach -- a deficiency which, as discussed above, the present Applicants advantageously SOLVE!

Thus, it has remained for the present Applicants and only the present Applicants to remedy the fundamental deficiency inherent in the approach taught by the Judson patent (whether modified by the teachings in the Capek et al patent or not). The Applicants do so by teaching the concept of embedding code, specifically an advertising tag, within a referring web page where that code does not contain a specific reference to an information object, e.g., an advertisement, that is to be interstitially displayed and, as a result, completely decouples the object from the contents of that page. Once the tag is executed by the browser, the object is then downloaded and subsequently interstitially displayed. By completely decoupling, through use of the code, the object from the contents of the referring web page, the Applicants provide a very flexible, cost-effective approach for interstitial display, particularly where relatively large numbers of referring web pages are involved.

There are simply no disclosures or suggestions, of any type, whether explicit or implicit, in either or both of these cited patents that would motivate a person of ordinary skill in the art, when faced with the task of implementing highly flexible, cost-effective Internet-distributed interstitial advertising, towards the teachings of the present invention. In fact, the combination posed by the Examiner -- which relies on tightly coupling a source (referring) web page to an object that is to be interstitially displayed -- teaches directly AWAY from the present invention.

Independent claim 106 contains appropriate recitations directed to the present invention. Specifically, this claim recites as follows, with those recitations shown in bolded type:

"A computer readable medium storing a first web page wherein the first web page comprises a plurality of computer readable instructions, **the instructions representing page content and embedded code, wherein the code, when executed by a client computer, causes the computer to:**

**download, from a network server and while the computer renders the first web page to a user through an output device operative in conjunction with the computer, at least one file which is to be subsequently employed, by the processor, to render an information object; and**

**in response to a user-initiated event, detected by the computer, for transitioning from the first web page to a next successive web page and which signifies a start of a next interstitial interval, suspend further downloading of**

files and process the one file so as to render the information object through the output device to the user during the interval; and

wherein use of the code eliminates a need to store content for the information object within the first web page thereby decoupling the object content from the first web page."  
[emphasis added]

Nearly identical and parallel distinguishing recitations appear in the Applicants' other pending independent claims, i.e., method claim 107 and apparatus claim 108.

As such, the Applicants submit that each of their independent claims, namely claims 106, 107 and 108, is not rendered obvious by the teachings in the Judson or Capek et al patents, whether taken singly or in the combination posed by the Examiner.

Accordingly, the Applicants submit that each of their independent claims is patentable under the provisions of 35 USC § 103.

Each of the remaining claims, specifically claims 3-10, 12-18, 20-25, 27-33, 35, 37-44, 46-52, 54-59, 61-67, 69, 71-78, 80-86, 88-93, 95-102 and 104 and 105, depends, either directly or indirectly, from independent claim 106, 107 or 108 and recites further distinguishing features of the present invention. Therefore, the Applicants submit that each of these dependent claims is patentable over the teachings of the Judson and Capek et al patents for the same exact reasons set forth above. Hence,

the Applicants submit that each of these dependent claims is also patentable under the provisions of 35 USC § 103.

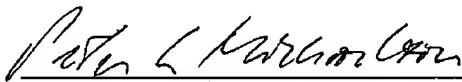
Conclusion

Thus, the Applicants submit that none of the claims, presently in the application, is obvious under the provisions of 35 USC § 103. Furthermore, the Applicants also submit that all of these claims now fully satisfy the requirements of 35 USC § 112.

Consequently, the Applicants believe that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

Respectfully submitted,

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